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Flex your power!
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May 19, 2008

03-Pla-65-R19.3/R38.3
03-3338U4
CML-6203(040)

Addendum No. 6

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in PLACER COUNTY NEAR LINCOLN FROM 0.6 KM NORTH OF TWELVE BRIDGES OVERCROSSING TO 1.3 KM SOUTH OF BEAR RIVER.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on May 21, 2008.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

On Project Plan Sheet 1315 under "STANDARD PLANS DATED JULY 2004," Standard Plan, "A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL- BRIDGE," is deleted.

In the Notice to Contractors and Special Provisions, in the "STANDARD PLANS LIST," the following Standard Plan is deleted.

"A62C Limits of Payments for Excavation and Backfill – Bridge."

In the Special Provisions, Section 10-1.41, "EARTHWORK," the following bridge in the table under the tenth paragraph, is deleted:

Bridge Name or Number	Abutment Number	Settlement Period (days)
Markham Ravine Bridge Right (Br No 19-0192R)	A-1 A-3	30 days 30 days

In the Special Provisions, Section 10-1.64, "PILING," subsection "GENERAL," the last paragraph is deleted.

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In the Special Provisions, Section 10-1.64, "PILING," subsection "CAST-IN-DRILLED-HOLE CONCRETE PILES," subsection "Construction," the following paragraphs are added after the last paragraph as follows:

"At the Contractor's option for Ferrari Ranch Road Undercrossing (Bridge No. 19-0189 L/R), a construction joint with permanent steel casing may be used for the construction of the cast-in-drilled-hole piles provided that the following requirements are met. Permanent steel casings shall be furnished and placed tight in the hole to an elevation at least 300 mm below the bottom of the column cage reinforcement. The top of the permanent steel casing shall not extend above the top of the pile shaft. The provisions in Section 49-1.08, "Pile Driving Acceptance Criteria," of the Standard Specifications do not apply to permanent steel casings. Permanent casings shall be watertight and of sufficient strength to withstand the loads from installation procedures, lateral concrete pressures, and earth pressures, and shall conform to the provisions of "Steel Pipe Piling" of these special provisions.

In addition if the Contractor elects to have a construction joint with permanent steel casing to be used for the construction of the cast-in-drilled-hole piles, the Contractor shall submit to the Engineer working drawings, including design calculations, and a construction sequence for the proposed method of the optional construction joint for cast-in-drilled-hole pile construction for the site in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. The drawings and calculations shall be signed by an engineer who is registered as a Civil Engineer in the State of California. One set of the drawings and construction sequence, and one copy of the design calculations, shall be furnished to the Engineer. The working drawings and construction sequence shall include, but not be limited to, defining order of work, details and dimensions of casing material, method of installation of the construction joint, support calculations for all loading conditions, and type of drilling and equipment to be used. The Contractor shall allow three weeks after complete drawings and support data are submitted for the review and approval of the proposed method of cast-in-drilled-hole construction joint construction. Steel reinforcement shall not be cut or fabricated to length until the working drawings are approved by the Engineer."

In the Special Provisions, Section 10-1.64, "PILING," subsection "CAST-IN-DRILLED-HOLE CONCRETE PILES," subsection "STEEL PIPE PILING," is added after the last paragraph of subsection "Acceptance Testing and Mitigations," as attached.

In the Special Provisions, Section 10-1.64, "PILING," subsection "MEASUREMENT AND PAYMENT," the following paragraphs are added after the last paragraph:

"Full compensation for working drawings and construction sequence at Ferrari Ranch Road Undercrossing (Bridge No. 19-0189 L/R) due to the Contractor's choice to utilize the optional construction joint shall be considered as included in the contract prices paid per meter for cast-in-drilled-hole concrete piling of the types and sizes listed in the Engineer's Estimate, and no separate payment will be made therefor.

Full compensation for furnishing and installing permanent steel casing at Ferrari Ranch Road Undercrossing (Bridge No. 19-0189 L/R) due to the Contractor's choice to utilize the optional construction joint shall be considered as included in the contract prices paid per meter for cast-in-drilled-hole concrete piling of the types and sizes listed in the Engineer's Estimate, and no separate payment will be made therefor.

Full compensation for conforming to the provisions in "Steel Pipe Piling" of these special provisions shall be considered as included in the contract prices paid for the various items of work involved, and no additional compensation will be allowed therefor."

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In the Proposal and Contract, the Engineer's Estimate Item 60 is revised as attached.

To Proposal and Contract book holders:

Replace page 5 of the Engineer's Estimate in the Proposal with the attached revised page 5 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the NOTICE TO CONTRACTORS section of the Notice to Contractors and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by confirmed facsimile to all book holders to ensure that each receives it. A copy of this addendum is available for the contractor's use on the Internet Site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief
Office of Plans, Specifications & Estimates
Division of Engineering Services - Office Engineer

Attachments

STEEL PIPE PILING

General

Steel pipe piling shall consist of permanent steel casing for cast-in-drilled-hole concrete piling at Ferrari Ranch Road Undercrossing (Bridge No. 19-0189 L/R). Steel pipe piling shall conform to the provisions in Section 49-5, "Steel Piles," of the Standard Specifications and these special provisions.

Wherever reference is made to the American Petroleum Institute (API) specification 5L in the Standard Specifications, on the project plans, or in these special provisions, the year of adoption shall be 2000. All requirements of that code shall apply unless specified otherwise in the Standard Specifications, on the plans, or in these special provisions.

Only longitudinal and spiral seam welds in steel pipe piles may be made by the electric resistance welding method. Those welds shall be welded in conformance with the requirements in API 5L and any amendments to API 5L in the Standard Specifications or these special provisions.

Steel Pipe piling shall either conform to the requirements in API 5L or AWS D1.1, and the provisions specified in Section 49-5, "Steel Piles," of the Standard Specifications and these special provisions.

Handling devices may be attached to steel pipe piling. Welds attaching these devices shall be aligned parallel to the axis of the pile and shall conform to the requirements for field welding specified herein. Permanent bolted connections shall be corrosion resistant. Prior to making attachments, the Contractor shall submit a plan to the Engineer that includes the locations, handling and fitting device details, and connection details. Attachments shall not be made to the steel pipe piling until the plan is approved in writing by the Engineer. The Contractor shall allow the Engineer 7 days for the review of the plan. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

For steel pipe piling, including bar reinforcement in the piling, the Contractor shall allow the Engineer 48 hours to review the Welding Report, specified in "Welding Quality Control" of these special provisions, and respond in writing after the required items have been received. No field welded steel pipe piling shall be installed, and no reinforcement in the piling shall be encased in concrete until the Engineer has approved the above requirements in writing. In the event the Engineer fails to complete the review and provide within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Steel Pipe in Conformance with API 5L

Steel pipe piling conforming to the requirements in API 5L shall conform to the following additional requirements:

- A. Each length of steel pipe piling shall be marked with the API monogram.
- B. The product shall be capable of meeting the fit-up requirements of AWS D1.1, Section 5.22.3.1, "Girth Weld Alignment (Tubular)," when the project requires the material to be spliced utilizing a girth weld.
- C. Welds made at a permanent facility shall be made by submerged arc welding or an electric resistance welding process.
- D. Except for tack welding, the gas metal arc welding process (GMAW) shall not be used for welding of pipe pile material. When GMAW is used for tacking, the electrode shall not be deposited by short circuiting transfer.
- E. The joining of pipe sections in a permanent facility utilizing a circumferential or jointer weld shall conform to the requirements in AWS D1.1.

Steel Pipe in Conformance with AWS D1.1

Steel pipe piling conforming to the requirements in AWS D1.1 shall conform to the following additional requirements:

- A. Weld filler metal shall conform to the requirements in AWS D1.5 for the welding of ASTM Designation: A709/A709M, Grade 345 steel, except that the qualification, pretest, and verification test requirements need not be conducted if certified test reports are provided for the consumables to be used.
- B. Except for tack welding, GMAW shall not be used for welding of pipe pile material. When GMAW is used for tacking, the electrode shall not be deposited by short circuiting transfer.
- C. Pipe piling designated as ASTM Designation A252, which has a yield strength of less than or equal to 450 MPa, shall be treated as ASTM Designation A572/A572M, Grade 345 material for the purpose of welding and prequalification of base metal, in conformance with the requirements in AWS D1.1.
- D. Each length of steel pipe piling shall be marked in conformance with the requirements in ASTM Designation: A252.
- E. The outside circumference of the steel pipe piling end shall not vary by more than 10 mm from that corresponding to the diameter shown on the plans.

Field Welding

Field welding of steel piling is defined as welding performed after the certificate of compliance has been furnished by the manufacturer or fabricator and shall conform to the following requirements:

- A. Match marking of pipe ends at the manufacturing or fabrication facility is recommended for piling to ensure weld joint fit-up. Prior to positioning any 2 sections of steel pipe to be spliced by field welding, including those that have been match marked at the manufacturing or fabrication facility, the Contractor shall equalize the offsets of the pipe ends to be joined and match mark the pipe ends.
- B. Welds made in the flat position or vertical position (where the longitudinal pipe axis is horizontal) shall be single-vee or double-vee groove welds. Welds made in the horizontal position (where the longitudinal pipe axis is vertical) shall be single-bevel groove welds. Joint fit-ups shall conform to the requirements in AWS D1.1, Section 5.22.3.1, "Girth Weld Alignment (Tubular)," and these special provisions.
- C. The minimum thickness of the backing ring shall be 6 mm, and the ring shall be continuous. Splices in the backing ring shall be made by complete penetration welds. These welds shall be completed, including visual inspection and any required nondestructive testing (NDT), prior to final insertion into a pipe end. The attachment of backing rings to pipe ends shall be done using the minimum size and spacing of tack welds that will securely hold the backing ring in place. Tack welding shall be done in the root area of the weld splice. Cracked tack welds shall be removed and replaced prior to subsequent weld passes. The gap between the backing ring and the steel pipe piling wall shall be no greater than 2 mm. One localized portion of the backing ring fit-up, that is equal to or less than a length that is 20 percent of the outside circumference of the pipe, as determined by the Engineer, may be offset by a gap equal to or less than 6 mm provided that this localized portion is first seal welded using shielded metal arc E7016 or E7018 electrodes. The Contractor shall mark this localized portion so that it can be referenced during any required NDT. Backing rings shall have a minimum width of 1 1/2 times the thickness of the pile to be welded or 65 mm, whichever is greater, so that the backing ring will not interfere with the interpretation of the NDT.
- D. For steel pipe with an outside diameter greater than 1.1 m, and with a wall thickness greater than 25.4 mm, the root opening tolerances may be increased to a maximum of 5 mm over the specified tolerances.
- E. Weld filler metal shall conform to the requirements shown in AWS D1.5 for the welding of ASTM Designation: A709/A709M, Grade 345 steel, except that the qualification, pretest, and verification test requirements need not be conducted if certified test reports are provided for the consumables to be used.
- F. For field welding limited to attaching backing rings and handling devices, the preheat and interpass temperature shall be in conformance with the requirements in AWS D1.1, Section 3.5, "Minimum Preheat and Interpass Temperature Requirements," and with Table 3.2, Category C.
- G. The minimum preheat and interpass temperature for production splice welding and for making repairs shall be 66°C, regardless of the pipe pile wall thickness or steel grade. In the event welding is disrupted, preheating to 66°C must occur before welding is resumed.
- H. Welds shall not be water quenched. Welds shall be allowed to cool unassisted to ambient temperature.
- I. Pipe piling designated as ASTM Designation A252, which has a yield strength of less than or equal to 450 MPa, shall be treated as ASTM Designation A572/A572M, Grade 345 material for the purposes of welding and prequalification of base metal, in conformance with the requirements in AWS D1.1.

At the Contractor's option, a steel pipe pile may be re-tapped to prevent pile set-up provided the field welded splice remains at least one meter above the work platform until that splice is approved in writing by the Engineer.

ENGINEER'S ESTIMATE
03-3338U4

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41 (S)	013641	REMOVE YELLOW TRAFFIC STRIPE	M	11 400		
42 (S)	013642	REMOVE WHITE TRAFFIC STRIPE	M	13 400		
43 (S)	150713	REMOVE PAVEMENT MARKING	M2	220		
44 (S)	150722	REMOVE PAVEMENT MARKER	EA	7370		
45	150742	REMOVE ROADSIDE SIGN	EA	42		
46	150747	REMOVE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	5		
47 (S)	150760	REMOVE SIGN STRUCTURE	EA	1		
48	150805	REMOVE CULVERT	M	640		
49	150820	REMOVE INLET	EA	12		
50	150821	REMOVE HEADWALL	EA	10		
51	150859	REMOVE ASPHALT CONCRETE OVERSIDE DRAIN	EA	2		
52	013643	REMOVE DETOUR	M3	30 900		
53	152390	RELOCATE ROADSIDE SIGN	EA	15		
54	152440	ADJUST MANHOLE TO GRADE	EA	3		
55 (S)	013644	MODIFY SIGN STRUCTURE (SAFETY CABLE RETROFIT)	EA	3		
56 (S)	153151	COLD PLANE ASPHALT CONCRETE PAVEMENT (25 MM MAXIMUM)	M2	14 200		
57	153215	REMOVE CONCRETE (CURB AND GUTTER)	M	1910		
58	153218	REMOVE CONCRETE SIDEWALK	M2	20		
59	157550	BRIDGE REMOVAL	LS	LUMP SUM	LUMP SUM	
60	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	